

Trail Cheat Sheet for Environmental

LDC

§ 25-8-1 - DEFINITIONS.

(12) MULTI-USE *TRAIL* means a facility designated for the use of pedestrians, bicycles, and/or other non-motorized users and associated bridges.

(13) OPEN SPACE means a public or private park, multi-use *trail*, golf cart path, the portions of a golf course left in a natural state, and an area intended for outdoor activities which does not significantly alter the existing natural vegetation, drainage patterns, or increase erosion. OPEN SPACE does not include parking lots.

§ 25-8-42 - ADMINISTRATIVE VARIANCES.

(B) The director of the Watershed Protection Department may grant a variance from a requirement of:

(1) [Section 25-8-261](#) (Critical Water Quality Zone Development), only if:

(d) necessary to allow a hard surfaced *trail* to be located in an area not otherwise allowed under [Section 25-8-261](#)(B)(3);

§ 25-8-63 - IMPERVIOUS COVER CALCULATIONS.

(C) Impervious cover calculations exclude:

- (1) sidewalks in a public right-of-way or public easement;
- (2) multi-use *trails* open to the public and located on public land or in a public easement;
- (7) areas with gravel placed over pervious surfaces that are used only for landscaping or by pedestrians and are not constructed with compacted base;
- (8) porous pavement designed in accordance with the Environmental Criteria Manual, limited to only pedestrian walkways and multi-use *trails*, and located outside the Edwards Aquifer Recharge Zone;

§ 25-8-261 - CRITICAL WATER QUALITY ZONE DEVELOPMENT.

(B) Open space is permitted in a critical water quality zone if a program of fertilizer, pesticide, and herbicide use is approved by the Watershed Protection Department, subject to the conditions in this Subsection.

(1) In a water supply rural watershed, water supply suburban, or the Barton Springs Zone, open space is limited to sustainable urban agriculture or a community garden if the requirements in subsection (B)(4) are met, multi-use *trails*, picnic facilities, and outdoor facilities, excluding stables, corrals for animals and athletic fields.

(2) A master planned park that is approved by the council may include recreational development other than that described in Subsection (B)(1).

(3) A hard surfaced *trail* may cross the critical water quality zone pursuant to [Section 25-8-262](#) (Critical Water Quality Zone Street Crossings). A hard surfaced *trail* that does not cross the critical water quality zone may be located within the critical water quality zone only if:

- (a) designed in accordance with the Environmental Criteria Manual;
- (b) located outside the erosion hazard zone unless protective works are provided as prescribed in the Drainage Criteria Manual;
- (c) limited to 12 feet in width unless a wider *trail* is designated in the Urban *Trails* Master Plan adopted by Council;
- (d) located not less than 25 feet from the centerline of a waterway if within an urban watershed;
- (e) located not less than 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, and 150 feet from the centerline of a major waterway if within a watershed other than an urban watershed;
- (f) located not less than 50 feet from the shoreline of Lake Travis, Lake Austin, Lady Bird Lake, and Lake Walter E. Long, as defined in [Section 25-8-92](#); and
- (g) located not less than 100 feet from the ordinary high water mark of the Colorado River downstream from Longhorn Dam.

§ 25-8-262 - CRITICAL WATER QUALITY ZONE STREET CROSSINGS.

(C) In all watersheds, multi-use *trails* may cross a critical water quality zone of any waterway.

§ 25-8-281 - CRITICAL ENVIRONMENTAL FEATURES.

(C) This subsection prescribes the requirements for critical environmental feature buffer zones.

(3) If located at least 50 feet from the edge of the critical environmental feature, the prohibition of Subsection (C)(2)(b) does not apply to:

(a) a yard or hiking *trail*; or

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1.5.3 - Development Allowed in the Critical Water Quality Zone

B. Open Space

- General. Open space is permitted in a Critical Water Quality Zone if an Integrated Pest Management Plan is approved by the Watershed Protection Department. The design of the open space should not significantly alter the existing natural vegetation, drainage patterns, or increase erosion. For open space uses **other than multi-use trails**, significant alteration of existing natural vegetation and/or drainage patterns includes:

- clearing of dense, diverse, riparian woody vegetation for an area greater than fifteen feet wide or a smaller area if the proposed clearing is not commensurate with the use and anticipated maintenance needs (Note: Measurement of woody vegetation cover does not include critical root zones);

- removal of native, non-invasive trees greater than eight inches in diameter;

- grading or earthwork that exceeds two feet of cut and fill;

- the installation of impervious cover with a connected footprint of greater than 250 square feet, if located more than 25 feet from the centerline of an urban waterway, 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, or 150 feet from the centerline of a major waterway;

- the installation of impervious cover with a connected footprint of greater than 100 square feet, if located less than 25 feet from the centerline of an urban waterway, 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, or 150 feet from the centerline of a major waterway; or

- the installation of impervious cover such that the cumulative total within the Critical Water Quality Zone for the site is greater than 500 square feet or 5 percent of the total gross area of the Critical Water Quality Zone, whichever is smaller.

A project proposing to exceed these guidelines due to unique site conditions may be evaluated and approved by the Planning and Development Review Department.

In addition, the project shall ensure that runoff is dispersed back to overland sheet flow and maximum projected flows and velocities are below erosive values for the particular soil conditions.

Open space includes the following uses:

- Multi-Use *Trail*. A multi-use *trail* means a facility designed for the use of pedestrians, bicycles, and/or other non-motorized users, including associated bridges. A multi-use *trail* can be either hard-surfaced (e.g. concrete) or have a more natural surface. Requirements and guidance for *trails* are discussed further below.
- Golf Cart Path. The requirements for a golf cart path within the Critical Water Quality Zone shall be identical to those for a hard-surfaced *trail*, with the exception of allowing a motorized use.

In a water supply rural watershed, a water supply suburban watershed, or the Barton Springs Zone, open space is limited to sustainable urban agriculture, community gardens, multi-use *trails*, picnic facilities, and outdoor facilities, excluding stables, corrals for animals, and athletic fields. A master planned park that is approved by Council may include recreational development other than the uses described under open space.

- *Trails*

Requirements

In all watersheds, multi-use *trails*-including hard-surfaced *trails*-may cross a Critical Water Quality Zone of any waterway. A *trail* with an earthen surface or soft surface (e.g. mulch, decomposed granite) is allowed anywhere within the Critical Water Quality Zone, provided that the *trail* follows the basic guidance for placement and design provided below. A *trail* with an earthen or soft surface should not exceed 6 feet in width if located closer to the waterway than the requirements for hard-surfaced *trails*. Otherwise, the maximum width shall be 12 feet, unless a wider *trail* is designated in the Urban *Trails* Master Plan. A hard surface (e.g. concrete) of less than or equal to 100 square feet may be installed for a limited length of what is otherwise an earthen surface or soft surface *trail* to avoid drainage or erosion problems.

A hard-surfaced *trail* includes a *trail* constructed using concrete or asphalt. A hard-surfaced *trail* is allowed within the Critical Water Quality Zone if:

1. Located outside of the erosion hazard zone, unless protective works are provided in accordance with the Drainage Criteria Manual;
2. A maximum of 12 feet wide, unless a wider *trail* is designated in the Urban *Trails* Master Plan;
3. In an urban watershed, located not less than 25 feet from the centerline of a waterway;
4. In a watershed other than urban, located not less than 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, or 150 feet from the centerline of a major waterway;
5. Located not less than 50 feet from the shoreline of Lake Travis, Lake Austin, Lady Bird Lake, and Lake Water E. Long; and
6. Located not less than 100 feet from the ordinary high water mark of the Colorado River downstream from Longhorn Dam.

In addition to these conditions, hard-surfaced *trails* should also follow the basic guidance for placement and design provided below.

Placement and Design

Avoid Sensitive Environmental Areas. A natural surface *trail* for hiking may be located within 50 feet of a critical environmental feature (CEF). Otherwise, multi-use *trails* are prohibited within CEF setbacks. The *trail* should avoid other environmentally sensitive areas where possible or take sufficient steps to minimize impacts on these systems. Other environmentally sensitive areas include priority or other significant woodlands and prairies as identified by the Environmental Resource Inventory. The *trail* should not be located along the sideslope of an embankment or in other areas with high erosion potential. If the applicant is proposing a hard-surfaced *trail* within 100 feet of the centerline of the waterway, within 100 feet of the ordinary high water mark of the Colorado River downstream from Longhorn Dam, or in a location where significant erosion is present, they will need to perform an erosion hazard zone analysis.

Utilize Areas that are Already Disturbed. Where feasible, locate *trails* in areas that have already been influenced by human activity, such as abandoned roads, utility easements, and existing paths. However, the *trail* must be located such that it does not threaten existing infrastructure, including, but not limited to, structural stormwater controls, engineered channels, storm drains, culverts, and dams, as determined by the department responsible for maintenance of the impacted infrastructure.

Promote Sustainable *Trail* Design. One of the most critical components of *trail* design is how the *trail* affects water flow and how the *trail* is affected by water. *Trails* that limit natural drainage patterns will often result in erosion, surface ponding, and high frequency of flows on the *trail* which limits access and can

significantly degrade the *trail* over time. The *trail* should promote the sheet flow of stormwater runoff and maintain natural drainage paths whenever possible through design considerations like *trail* location, grade, and cross slope. *Trails* using decomposed granite should limit the running slope and cross slope to reduce sloughing and gullyng. A running slope of less than 3 percent and a cross slope of less than 2 percent are recommended.

Administrative Variance

An administrative variance is available under Section 25-8-42 to allow a hard-surfaced *trail* to be placed closer to the waterway than designated in Section 25-8-261(B)(3). To qualify for this variance, the applicant will need to demonstrate that placement of the *trail* in the outer half of the Critical Water Quality Zone is infeasible due to unique site conditions including but not limited to.

- Location of existing development or infrastructure within the outer half of the Critical Water Quality Zone.
- Not owning land within the outer half of the Critical Water Quality Zone.
- Location of environmentally sensitive features (e.g., critical environmental features, steep slopes) within the outer half of the Critical Water Quality Zone.
- A hard surface (e.g. concrete) of greater than 100 square feet is necessary for a limited length of what is otherwise an earthen or soft surface *trail* within the inner half of the Critical Water Quality Zone to avoid drainage or erosion problems.

The proposed *trail* alignment under the variance should be a minimal departure from the requirements. The *trail* should only cross into the inner half of the Critical Water Quality Zone where necessary to avoid existing features and to minimize the overall disturbance.

J. Street Crossings

In all watersheds, multi-use *trails* may cross a Critical Water Quality Zone of any waterway.